

IN THE CLAIMS:

Amend claims 1-2 and add new claims 3-15 as shown in the following listing of claims, which replaces all previous listings and versions of claims.

1. (currently amended) An overload prevention device for an auger transmission of a snow removing machine ~~for preventing of a snow-remover for, in the transmission of power from an engine through an auger transmission to an auger shaft and an auger, preventing~~ an excessive load from acting on ~~the~~ a power train of the auger transmission from ~~the~~ an engine to ~~the~~ an auger and an auger shaft of the snow removing machine, the overload prevention device comprising:

a worm wheel ~~for~~ meshing with a worm ~~provided~~ formed on an input shaft of the auger transmission, the worm wheel having a plurality of wheel protrusions formed at a side surface thereof;

a cylindrical ~~member, which is fitted in~~ member integrally connected to the auger shaft and engaging with the worm wheel for rotation ~~and consequently rotates integrally therewith over a predetermined torque range and~~ for rotation ~~rotates~~ relative thereto when a predetermined torque is exceeded, ~~and which is attached integrally to the auger shaft~~ exceeded;

a generally disk-shaped member disposed ~~disc, which~~
~~is limited in angle of turn with respect to the cylindrical~~
~~member and is~~ adjacent to the worm wheel for restricting a
rotating angle of the cylindrical member, the disk-shaped
member having ~~and has~~ a plurality of ~~disc~~ generally disk-
shaped protuberances facing a ~~plurality of the~~ wheel
protrusions ~~provided on a respective side face of the worm~~
wheel;

a ~~detector, which detects~~ detector for outputting a
detection signal each time the detector detects movement of
the disk-shaped member ~~disc~~ away from a the side face surface
of the worm wheel when the protuberances of the disk-shaped
member ride on the wheel protrusions of the worm wheel
responsive to rotation ~~due to turning~~ of the cylindrical
member ~~relative to~~ and the worm wheel ~~the disc~~ protuberances
~~mount the wheel protrusions~~ relative to one another; and

a control unit, ~~which stops~~ for stopping operation
of the engine when the detector outputs the ~~number of times a~~
~~detection signal has been generated by this detector reaches a~~
~~predetermined~~ a preselected number of times within a
~~predetermined~~ preselected time period.

2. (currently amended) An overload prevention
device according to ~~claim 1, wherein~~ claim 1; wherein each of
the wheel protrusions of the worm wheel has a ~~flat part at a~~

top thereof portion having a planar surface extending in a direction generally perpendicular to an axis of rotation of the worm wheel.

3. (new) An overload prevention device according to claim 2; wherein each of the protuberances of the disk-shaped member comprises a first louver-shaped portion and a second louver-shaped portion; and wherein a distance between confronting tip portions of the first and second louver-shaped portions is shorter than a length of the planar surface of the top portion of the wheel protrusion.

4. (new) An overload prevention device according to claim 1; further comprising a waterproof cover for covering the detector in a waterproof manner.

5. (new) An overload prevention device according to claim 1; wherein the control unit comprises a signal processing circuit for receiving and processing the detection signal from the detector, a control integrated circuit for controlling operation of the engine in accordance with a signal from the signal processing circuit, a reset timer initiated by a command signal from the control integrated circuit when the signal processing circuit receives the detection signal from the detector, and an engine stopping circuit for stopping operation of the engine in accordance

with a control signal from the control integrated circuit when the detection signal of the detector is outputted a preselected number of times within the preselected time period.

6. (new) An overload prevention device according to claim 1; wherein the detector has an ON state corresponding to a state during which the detector outputs the output signal and an OFF state corresponding to a state during which the detector does not output the output signal; and further comprising a stopper member for temporarily stopping movement of the disk-shaped member to restore the detector to the OFF state from the ON state.

7. (new) An overload prevention device according to claim 6; further comprising a biasing member for biasing the stopper member in the direction of the disk-shaped member.

8. (new) An overload prevention device according to claim 6; wherein the stopper member is mounted for undergoing sliding movement in a direction generally perpendicular to the side surface of the worm wheel.

9. (new) An overload prevention device according to claim 6; wherein the stopper member is slidably received in a transmission case of the auger transmission.

10. (new) In combination with a snow removing machine having an engine, an auger, and an auger transmission for transmitting power from the engine to the auger, an overload prevention device for preventing an excessive load on the auger transmission, the overload prevention device comprising:

a first rotational member connected to be rotationally driven by an input shaft of the auger transmission, the first rotational member having a plurality of protrusions formed at a surface thereof;

a second rotational member engaging the first rotational member for rotation therewith over a predetermined torque range and for rotation relative thereto when a predetermined torque is exceeded;

a movable member mounted adjacent to the first rotational member for undergoing movement to restrict a rotating angle of the second rotational member, the movable member having a plurality of protuberances for engagement with the protrusions of the first rotational member;

a detector for outputting a detection signal each time the detector detects movement of the movable member in a direction away from the first rotational member when the protuberances of the movable member engage the protrusions of the first rotational member responsive to rotation of the

second rotational member and the first rotational member relative to one another; and

a control unit for stopping operation of the engine when the detector outputs the detection signal a preselected number of times within a preselected time period.

11. (new) A combination according to claim 10; wherein each of the protrusions of the movable member has a portion having a planar surface extending in a direction generally perpendicular to an axis of rotation of the first rotational member.

12. (new) A combination according to claim 11; wherein each of the protuberances of the movable member comprises a first louver-shaped portion and a second louver-shaped portion; and wherein a distance between confronting tip portions of the first and second louver-shaped portions is shorter than a length of the planar surface of the top portion of the first rotational member.

13. (new) A combination according to claim 10; further comprising a waterproof cover for covering the detector in a waterproof manner.

14. (new) A combination according to claim 10; wherein the control unit comprises a signal processing circuit for receiving and processing the detection signal from the

detector, a control integrated circuit for controlling operation of the engine in accordance with a signal from the signal processing circuit, a reset timer initiated by a command signal from the control integrated circuit when the signal processing circuit receives the detection signal from the detector, and an engine stopping circuit for stopping operation of the engine in accordance with a control signal from the control integrated circuit when the detection signal of the detector is outputted a preselected number of times within the preselected time period.

15. (new) A combination according to claim 10; wherein the detector has an ON state corresponding to a state during which the detector outputs the output signal and an OFF state corresponding to a state during which the detector does not output the output signal; and further comprising a stopper member for temporarily stopping movement of the third rotational member to restore the detector to the OFF state from the ON state.

16. (new) A combination according to claim 15; further comprising a biasing member for biasing the stopper member in the direction of the movable member.

17. (new) A combination according to claim 15; wherein the stopper member is mounted for undergoing sliding movement in a direction generally perpendicular to the surface of the first rotational member at which the protrusions are formed.

18. (new) A combination according to claim 15; wherein the stopper member is slidably received in a transmission case of the auger transmission.

19. (new) A combination according to claim 10; wherein the first rotational member comprises a worm wheel meshing with a worm formed on the input shaft of the auger transmission.

20. (new) A combination according to claim 10; wherein the second rotational member is generally cylindrical-shaped and the movable member is generally disk-shaped.